APPROVED: Lim Hackworth
DIRECTOR OF PUBLIC WORKS

## COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS

## FIRE SUPPLY STORAGE TANK NOTES

DATE: JULY, 2005 NTS PLATE U-5.3

## NOTES:

- I. TANK SHALL BE WARRANTED FOR 30 YEARS AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS.
- 2. TANK VOLUME, LOCATION, MATERIALS, DESIGN, AND HYDRANT PLACEMENT SHALL COMPLY WITH PROJECT APPROVALS AND ARE SUBJECT TO LOCAL FIRE DISTRICT APPROVALS. IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CONDITION SHALL APPLY. ROAD DISTANCES TO HYDRANTS SHALL NOT EXCEED 1000' FOR LOTS UP TO 3 ACRES, AND 2000' FOR LOTS BETWEEN 3 ACRES AND 20 ACRES UNLESS OTHER APPROVED.
- 3. TANKS ELEVATED ABOVE GRADE SHALL BE DESIGNED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN CALIFORNIA. PARTIALLY OR COMPLETELY BURIED TANKS ARE EXEMPT UNDER THE UNIFORM BUILDING CODE, AND DO NOT REQUIRE ENGINEERING. TANKS SUPPORTED ON—GRADE, IF UNDER 5000 GAL. CAPACITY AND NOT EXCEEDING A 2:1 HEIGHT—TO—DIAMETER RATIO ARE LIKEWISE EXEMPT, AND DO NOT REQUIRE ENGINEERING. ALL OTHER TANKS REQUIRE AN ENGINEERED DESIGN.
- 4. TANKS SHALL BE CONSTRUCTED OF NON-CORROSIVE MATERIAL OR TREATED MATERIAL. CORROSIVE MATERIALS SHALL COMPLY WITH THE FOLLOWING:
  - A) PAINTS AND COATINGS SHALL COMPLY WITH THE LATEST PLACER COUNTY WATER AGENCY (PCWA) SPECIFICATIONS.
  - B) TANKS SHALL HAVE A MINIMUM WALL THICKNESS OF 1/2 INCH.
  - C) THE TANK INTERIOR SHALL BE SANDBLASTED AND TREATED PER PCWA SPECIFICATIONS.
  - D) THE TANK EXTERIOR SHALL BE TREATED WITH APPROPRIATE COATINGS PER PCWA SPECIFICATIONS.
  - E) TANK TREATMENT SHALL PROVIDE FOR A MINIMUM USEFUL LIFE OF 50 YEARS.
  - F) CATHODIC PROTECTION, IF REQUIRED, SHALL BE DESIGNED BY A NATIONAL ASSOCIATION OF CORROSION ENGINEERS CERTIFIED OR A CALIFORNIA REGISTERED CORROSION ENGINEER. SPECIAL INSPECTION WILL BE REQUIRED FOR SUCH INSTALLATIONS.
  - G) CERTIFICATES OF COMPLIANCE FOR THE ABOVE SHALL BE PROVIDED TO THE COUNTY'S INSPECTOR PRIOR TO ACCEPTANCE OF THE TANK(S).
- 5. WHEN REQUIRED, A HYDRAULIC ANALYSIS OF THE SYSTEM SHALL BE PROVIDED BY A CALIFORNIA REGISTERED CIVIL ENGINEER.
- 6. ALL COMPONENTS OF THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY GENERAL SPECIFICATIONS AND THE LATEST VERSION OF PCWA SPECIFICATIONS.
- 7. AFTER INSTALLATION, THE TANK SHALL RECEIVE A LOW PRESSURE AIR TEST PER UNDERWRITER'S LABORATORY REQUIREMENTS.
- 8. 6" PVC PIPE SHALL MEET ALL AWWA C900 STANDRDS. THRUST BLOCKS SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION.
- 9. STANDARD DRY-BARREL HYDRANT(S) SHALL BE CONFIGURED WITH 4 1/2 INCH AND 2 1/2 INCH FIRE CONNECTIONS AND A 6 INCH UNDERGROUND VALVE. HYDRANT IS TO BE PERMANENTLY LABELED "DRAFT ONLY", AND INSTALLED WITH A STANDARD BURY, CONCRETE KICKER, AND BREAK-OFF BOLT ASSEMBLY, AS APPROVED BY THE DISTRICT, A 4 INCH STAND PIPE WITH A PERMANENTLY ATTACHED 4 1/2 INCH X 2 1/2 INCH FEMALE SWIVEL NATIONAL HOSE THREAD FITTING MAY BE SUBSTITUTED FOR A HYDRANT. THE STAND PIPE SHALL BE BETWEEN 18 INCHES AND 30 INCHES ABOVE GRADE.
- 10. A REFLECTORIZED BLUE MARKER WITH A MINIMUM DIMENSION OF 3 INCHES SHALL BE MOUNTED ON A FIRE RETARDANT POST PLACED WITHIN 3 FEET OF THE HYDANT/FIRE VALVE. THE MARKER SHALL BE MOUNTED HORIZONTALLY, BETWEEN 3 AND 5 FEET ABOVE THE GROUND, AND VISIBLE FROM THE ROADWAY, OR AS SPECIFIED IN THE LATEST VERSION OF THE STATE FIRE MARSHAL'S GUIDELINES FOR FIRE HYDRANT MARKINGS ALONG STATE HIGHWAYS AND FREEWAYS.